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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/772,593 | 02/06/2004 | Masahiro Omata | 040302-0382 | 5185 |

22428 7590 04/10/2007
FOLEY AND LARDNER LLP
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| EXAMINER |
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RACHUBA, MAURINA T

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| ART UNIT | PAPER NUMBER |
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3723

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 04/10/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/772,593 | OMATA ET AL. | |
| | Examiner | Art Unit | |
| | Maurina Rachuba | 3723 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18, 25-29, 35-37, 39-42 and 44 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 6-8, 10-18, 25-29, 35, 37, 39-42 and 44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 9 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 2-4, 6-8, 10-18, 25-29, 35, 37, 39-42 and 44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 20 March 2006.

Claim Rejections - 35 USC § 112

2. Applicant has provided evidence of support for the shoe set being spaced apart from each other by a distance of the width times an integer, and has overcome the rejections based on 35 USC 112.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 5, 9 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Judge, et al, 4,682,444 in view of Cothrell et al, 4,525,955, as set forth in the Office action mailed 24 October 2006.

Response to Arguments

5. Applicant's arguments filed 24 January 2007 have been fully considered but they are not persuasive. Applicant argues that Judge does not disclose the claimed spacing, and that such spacing cannot be considered a result effective variable absent applicant's disclosure. The examiner disagrees. Judge discloses setting the shoes the required distance to lap the work piece, dependent on the size of the work piece and the

required rate of material removal. See figures 4 and 5 and column 6, lines 61 through column 7, lines 9. Note that inserts **36** are considered to be the shoes, and that they are spaced apart a distance. Judge discloses that the shoe spacing results in lesser or greater rates of material removal, as desired. This is a “result effective variable”. It is the examiner’s position that one of ordinary skill in the art would recognize that the spacing of the shoes, in any desired multiple, would have been obvious, dependent on the desired rate of material removal, as taught by Judge. Further, applicant argues that Judge does not disclose indexing that tape by an amount of the distance of the width times an integer. Judge discloses that the indexing of the tape is such that a predetermined length of *new abrasive material* is brought into the shoe assembly, such that the *abrasive surface is constantly renewed*. The indexing would, as disclosed by Judge, have to prevent overlapping and use of old abrasive surface. The indexing must inherently take into account the size of the shoe surface and the number of shoes contacting the workpiece, and the tape must be indexed by at least the size of the shoe times the number of shoes, to present to the work piece an abrasive surface that is renewed. Therefore, the film feeder is configured to feed the film at least by an amount of the distance of the width of the shoes times an integer.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurina Rachuba whose telephone number is 571 272 4493. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571 272 4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Maurina Rachuba
Primary Examiner
Art Unit 3723

